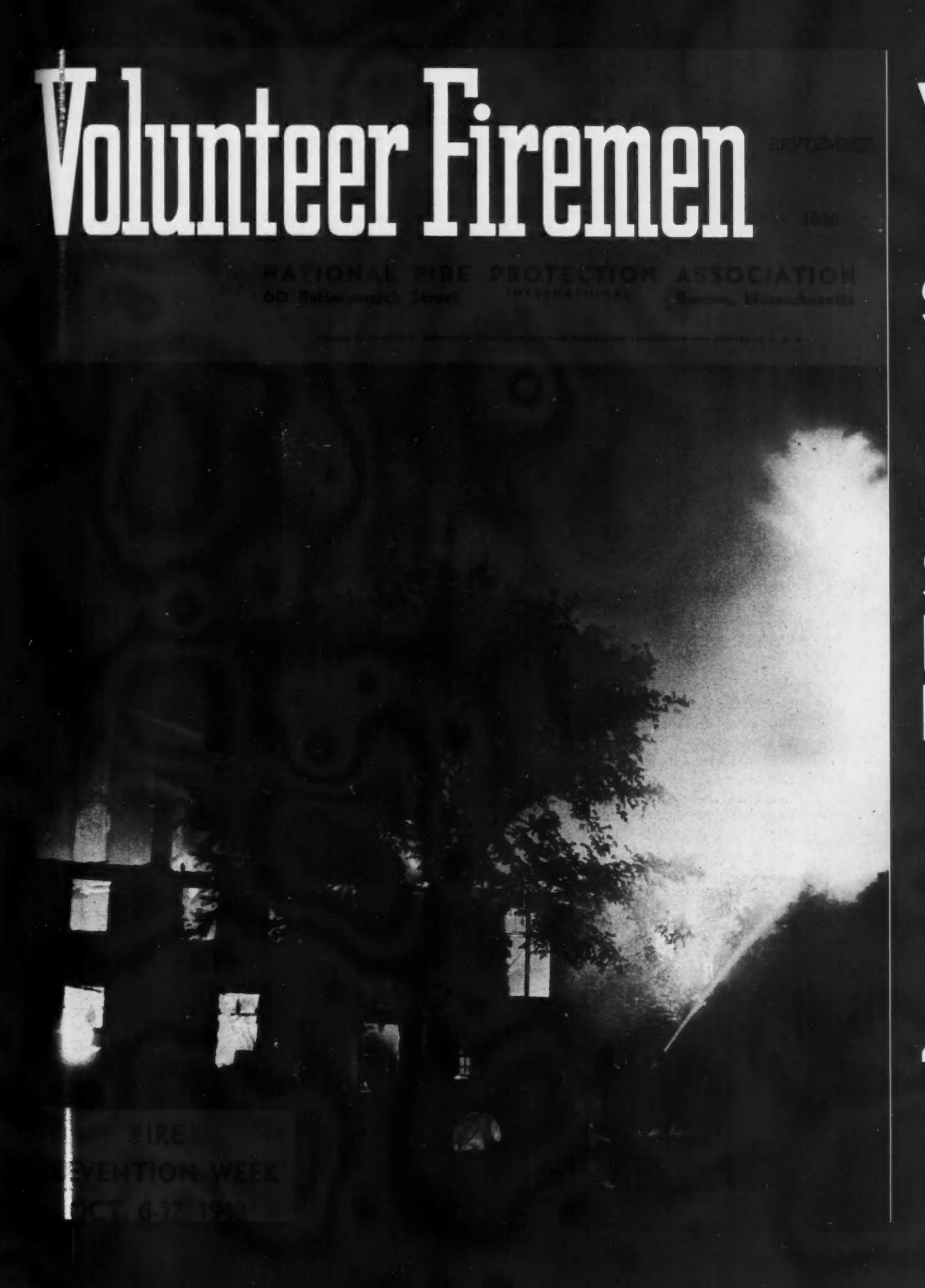
Volunteer Firemen



ANOTHER LARGE-LOSS FIRE...

that DIDN'T happen!

"...had it not been for Aero, damage amounting to thousands of dollars would have resulted, and we should have been, at least temporarily, out of business." L. F. Tuffly

It was a perfect "set-up" for a blaze of major proportions...

...when fire broke out, shortly after 3:00 a.m., in the basement of the Krupp & Tuffly shoe concern in Houston...

Stored in the basement were boxes, cartons, and other flammable materials ordinarily found in a retail shoe establishment. An elevator shaft provided a nearby vertical artery to spread flames and smoke throughout the three floors above. And there was no one on the premises...

Yet with all these conditions—unavoidable, yet "ideal" for the rapid spread of fire—*there was no loss.* For the executives of this concern long ago realized that certain fire and smoke damage hazards were inherent in the nature of their business, and adopted A.D.T. Automatic Fire Alarm protection. Their foresight was well repaid on this occasion, for Aero automatically detected the outbreak at the very start, and automatically summoned the fire department in time to extinguish the blaze with chemicals before any damage resulted.

★ ★ ★

Every year there are scores of such "large-loss fires THAT DON'T HAPPEN," *thanks to A.D.T. Aero Automatic Fire Alarm. For Aero eliminates the hazards of belated discovery and delayed alarms, which fire protection authorities agree are the underlying causes in nine out of ten large-loss fires.*

The Aero System is available for any type or size of building anywhere in the United States. If you have any buildings in your community, where belated discovery or a delayed alarm would mean a hopeless, dangerous battle, let us know and we will gladly cooperate with you in consulting the owners about Aero Protection. Write for descripive booklets and further information.

A. D. T. AERO AUTOMATIC FIRE ALARM

Controlled Companies of **AMERICAN DISTRICT TELEGRAPH CO.** *155 Sixth Avenue, New York, N. Y.*

CENTRAL STATION OFFICES IN ALL PRINCIPAL CITIES OF THE UNITED STATES

A·D·T

Electric Protection Services

AGAINST FIRE · BURGLARY · HOLDUP

A NATION-WIDE ORGANIZATION

Volunteer Firemen

Volume 7 Number 9

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CONTENTS
For September 1940

	Page
Sprinkler Equipments. N.F.P.A.'s No. 1 Technical Committee Revises an Historic Standard	4
Conflagration Breeder Runs True to Form. Camden, N. J., Fire	5
Doc Jed. A Fire Prevention Week Story	6
Volunteers Die in Rescue Attempt. Suggested Rescue Procedure	8
Fundamentals of Fire Prevention Are Not New	9
Stopping False Alarms	10
When Is a Building "Fire-proof"?	11
"Pied Piper" Tactics Trap Apparatus Chasers	12
Water in Flooded Basement Furnishes Suction	12
Fire School Notes	13
Pyrene Prize Letter Contest	14

THIS month's cover picture shows a fire which destroyed a 33-room house at Locust Valley, Long Island, N. Y. Four volunteer fire companies had to lay more than 3,000 feet of hose to reach the nearest hydrant. Such fires are all too frequent an occurrence where large estates are located outside of areas served by public water supplies. Owners of such properties should realize that once a fire gains headway, fire departments may be almost helpless to prevent a total loss. This indicates a need for private fire protection facilities such as alarm systems to give prompt notice of incipient fires and private water supplies adequate for fire fighting as well as domestic uses.

THE futility of operating fire apparatus at speeds in excess of those recognized as safe and adequate is again demonstrated by the tragic death of three firemen, members of an Ohio rural fire department, and the serious injury to five other members of the company and complete destruction of their new $7,000 fire truck. "This was all in addition to the loss of the property they were intent upon saving," comments H. J. Manning, Chief Engineer of the Ohio Inspection Bureau. He calls attention to the fact that this accident is almost exactly parallel to one which occurred some eight years ago in another rural department of the state. Five men were killed, four others seriously injured and the equipment was also destroyed.

The most recent accident occurred at North Lima, Ohio, when the truck, reported to have been traveling at some eighty miles per hour, failed to negotiate a curve and crashed into a ditch. The department's objective was a burning barn located about five miles from the fire station. It could have been reached in about seven minutes had the truck held its speed below forty-five miles per hour. The attempt to save only two or three minutes on this run spelled the difference between safety and disaster.

THE railroad tragedy near Cuyahoga Falls, Ohio, on July 31, in which 43 persons met a flaming death following a head-on collision between a gasoline driven rail coach and a freight train is a grim reminder of the major part that fire plays in many disasters. Fires following various types of accidents whether the collapse of buildings, automobile or plane crashes, or railroad wrecks, may multiply the toll several fold. Since the advent of air brakes, block signals, and steel coaches, the old-fashioned terrifying train wreck has largely been eliminated as a source of worry for travelers. It seems unlikely that such wholesale destruction of human life could have resulted from the recent Ohio crash had not the victims been instantly enveloped by flaming motor fuel, indicating that most of these fatalities should be charged against fire.

MOST persons are doubtless more or less familiar with the service rendered by the fire department rescue squads of various cities. Many, however, may not realize how many excellent volunteer rescue squads have been organized in hundreds of smaller communities. These volunteer rescue and emergency squads are usually a unit of the local fire department. Squad members have standard first aid training and utilize the latest rescue equipment and appliances.

Captain William Paul Babcock, of Nyack, New York, Secretary of the Rockland County Emergency and First Aid Council, Inc., would like to correspond with persons interested in forming other county or regional emergency councils. The councils seek to promote efficiency through the exchange of technical information and co-ordination of operations under emergency conditions.

PLANS must be started now if you are to have a successful observance of Fire Prevention Week, October 6-12, in your community. See pages 6, 7 and 13 of this issue for suggestions and campaign materials.

LAST month 4 departments with 75 men joined the Volunteer Firemen's Section for the first time. In addition 28 departments with 621 men renewed membership. This makes the total enrollment 689 departments and 14,583 men. The following departments are newly enrolled:

Milwood Fire Department, Kalamazoo, Michigan.

St. Johns Fire Department, St. Johns, Michigan.

White Horse Volunteer Fire Company, White Horse, New Jersey.

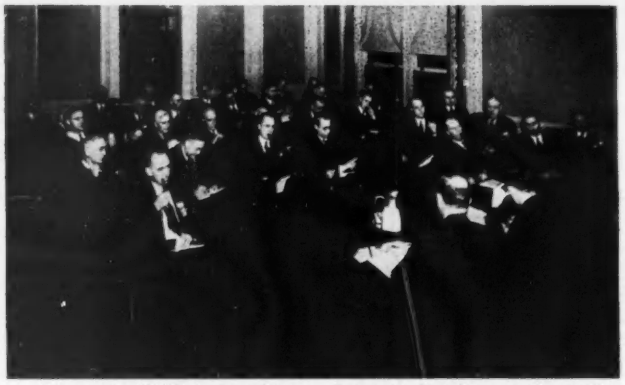
Ocean Beach Fire Department, Ocean Beach, New York.

THE estimated U. S. fire loss for July, 1940, according to the National Board of Fire Underwriters is $20,322,800. This figure is based on notices of incurred loss received by insurance companies, members of the board, plus an allowance for unreported and uninsured losses. Losses for the first seven months of 1940 are $2,039,050 ahead of the losses for the same seven months of 1939. The following table shows the losses for these months of 1939 and 1940:

	1939	1940
January	$27,615,316	$36,260,650
February	29,303,520	34,410,250
March	30,682,168	29,788,800
April	27,061,522	26,657,190
May	27,031,700	23,446,590
June	24,190,700	19,506,000
July	22,468,304	20,322,800
Total 7 months	$188,353,230	$190,392,280

Sprinkler Equipments

N.F.P.A.'s No. 1 Technical Committee Produces Revised Edition of an Historic Standard



Here is the N.F.P.A. Committee on Automatic Sprinklers at the meeting at which they gave final approval of the new standard on Sprinkler Equipments. Chairman (in foreground, back to camera) is C. W. Johnson, Assistant Secretary, Insurance Company of North America. In the front row (pipe in mouth) is Robert S. Moulton, N.F.P.A. Technical Secretary who coordinates the work of all N.F.P.A. committees.

MEMBERS of the National Fire Protection Association are receiving this month copies of the 132-page booklet containing the latest revision of the N.F.P.A. standard on Sprinkler Equipments in the edition published by the N.F.P.A. member, the National Board of Fire Underwriters.

This standard is of more than routine importance. For one thing, the rules on automatic sprinklers have undergone a major revision. But what is more important, these rules have roots which extend deeply into the very origins of the National Fire Protection Association.

Fire protection had its beginnings in the cotton mills of New England. All too frequently when a machine opening a bale of cotton struck a spark, the entire mill burned down. The men who ran these mills were reasonable human beings. They couldn't see sense in that. They applied common sense to the construction, arrangement and protection of these mills and gradually reduced the frequency and seriousness of fires.

One of the things they early realized was that the control of fires through manually operated hose streams was at best an inefficient practice. They conceived that water could be piped to every part of a building for fire extinguishment. This was accomplished about the middle of the last century. It became the practice to install piping along the ceiling of every factory building which would carry water directly to the seat of the fire. The automatic sprinkler head was invented which provided a means of turning the water on the fire whenever sufficient heat was developed to melt a fusible element in the head. Various concerns went into the business of installing automatic sprinkler systems.

Before installation work starts a plan is drawn and submitted to the owner for approval. If the installation is made to comply with a state law or a municipal building code, the state or city official may also pass on the installation. Nearly all sprinkler systems are submitted for the approval of an engineer in the inspection department serving the particular insurance company which insures the property in which the system is to be installed. Most of the work of passing on sprinkler systems has been handled by these inspection department engineers. The competent and thorough manner in which they have done their work is the principal reason why automatic sprinklers have such a remarkable record of successes (96 per cent over a period of 44 years). As a practical matter, where a public official also has to pass on a sprinkler installation he will generally ask the inspection department having jurisdiction to pass on the installation. In general a system checked as satisfactory by the insurance engineer is one the public official can accept.

This condition is possible because owners, manufacturers, contractors, public officials and insurance engineers are all working under the same standard rules of good practice on sprinkler systems. This was not always the case.

It was far from true in the days of the early development of sprinkler systems. It can be easily understood that there were a thousand and one details of such installations on which judgment might be exercised. There were differences of opinion on many details, such as the spacing of heads, the size and arrangement of piping, water supplies, alarm devices and other details.

One of the compelling reasons for the formation of the National Fire Protection Association was found in the need of machinery whereby all persons interested in the proper design of sprinkler systems could get together and agree on a practice which could be accepted as standard. The N.F.P.A. was to furnish such a procedure. The sprinkler committee was the No. 1 N.F.P.A. Committee. As of today there are more than 40 N.F.P.A. technical committees dealing with all phases of fire protection work.

The sprinkler rules prepared by this committee have been revised from time to time in the last 45 years. At the 1938 annual meeting of the N.F.P.A. plans were outlined for a complete overhauling of the rules. Changes in business and industry have occurred and although sprinkler practice was well established there were numerous improvements which the committee had had in mind. A new draft was circulated in preliminary form at the 1939 annual meeting. The revised rules were approved at the N.F.P.A. annual meeting in May of this year.

The new rules differ from former editions in that they provide for systems to protect hazards of occupancy more closely than the former rules. More than half of the pamphlet containing the rules is taken up with an appendix containing general information helpful to persons using the rules. Illustrations show how a building should be prepared for the installation of automatic sprinklers, how flow tests should be made of the water supply available, and detailed sketches showing typical layouts of piping, valves and connections.

CONFLAGRATION BREEDER RUNS TO FORM

Camden, N. J., Auto Polish Factory Blows Up, Kills Nine and Spreads Fire to 35 Dwellings

Top and bottom photos International; center and right views Acme

New Jersey volunteer fire departments rushed to the aid of the Camden Fire Department on the afternoon of July 30, when a severe explosion in the automobile polish manufacturing plant of the R. M. Hollingshead Corp. started the worst conflagration in the history of that city. Nine persons were killed and several hundred others were injured as flames trapped employees. The hazards and arrangement of the plant apparently made it a first-class conflagration breeder. It was already too late to save the group of five story factory buildings when the firemen arrived. Heavy streams from turret and ladder pipes were set up along adjacent streets to throw a water curtain between the fire and threatened buildings. Some thirty exposed dwellings were seriously damaged or destroyed before the fire could be controlled. The total loss may reach $2,000,000.

DOC JED

A FIRE PREVENTION WEEK STORY

by

Harry Hollander

3:25 A. M. Screeching sirens broke the quiet of the night. Fire engines racing over the country road! I jumped out of bed, put on a robe, ran through the woods toward the dancing yellow glare in the distance. Soon that unforgettable smell of acrid smoke hit my nostrils. I arrived just in time to see Doctor Jed's house cave in.

From the picture we took, you can see the remains of Jed's bed, at the right of the chimney. There was nothing left of the house. When the fire finally died down, they found Jed's charred body in the ruins.

Doc, as he liked to be called, unlike most men of the medical profession, used to be a fatalist. I asked him once why he didn't put lightning rods on his barn. "Well," he said, "can't say that I believe in them, for what is going to happen will." Sure enough two summers ago the barn was struck by lightning. Fire broke out in the hay loft, and most of the animals died in the blaze.

Recently, however, the doctor changed his views about fate. Last 5th of July his little girl died of burns when her dress caught fire from a sparkler. Jed admitted that he had read the yearly American Medical Association reports on the number of 4th of July casualties. In fact, many were the burns and lacerations that he treated on that famous American holiday. "They are inevitable, these accidents," he used to say, "kind of a sacrifice to our continuing freedom." Doctors are hardened to tragedy, but when an accident happens to one of their dear ones, it strikes pretty hard. Jed no longer was a fatalist.

Several weeks ago I showed him a magazine article on fire protection. He was interested at once when he found that fire protection organizations were campaigning for the anti-fireworks law now in force in nine of these United States. No less impressed was he by the fact that the loss of life from fire last year in the United States was about 10,000 persons, and the estimated property loss from fire $275,000,000.

Returning from the city one evening, he stopped in at my house and showed me a newspaper clipping about Fire Prevention Week. "I know," I said, "it's the anniversary of the Chicago Fire which took place on October 9, 1871. It is a seven-day period that is set aside as an annual occasion to impress upon the public the enormous cost of fire waste and to show the people that conditions can be improved and that fire carelessness can be reduced."

Jed, like all good professional men who have their interest and curiosity aroused about a particular subject, began to pursue this new-found study of fire protection with a diligence and thoroughness that is hard to beat. He wrote the N.F.P.A. for Fire Prevention Week literature and told me that he would call me when the material arrived.

Several days later Jed telephoned.

"The literature's here," said Doc. "Walk over later and we'll take a look at it."

Strange coincidence that the doctor and I should have spent last evening discussing fire prevention material. I can see Doc now, feet up on the porch ledge leaning back in one of his newly painted chairs. The weather was hot and dry. By the light of a kerosene lamp, Doc began to read snatches from the leaflets and books that were sprawled out on the big oak table. "Here's something I didn't realize," said the Doc, raising his eyebrows and letting a wisp of smoke from his pipe curl out of his mouth. "What a great number of organizations there are that are interested in actively promoting fire protection. Here is a piece by the Chairman of the Agricultural Committee of the National Fire Waste Council. Let me read it to you."

"'It is a national crime that over $100,000,000 of our farm wealth was consumed by fire last year. $100,000,000 lost by carelessness and neglect. $100,000,000 of farm property gone up in smoke; totally destroyed; never to be returned. Just think what that same money would have done had it been used to feed and clothe the hungry people of the world, but instead it was destroyed with profit to no man. It left in its wake a worthless heap of smouldering ashes.'"

"Why, I'm essentially a farmer right now," suggested the Doc. "Suppose this house should burn down? . . . but that's impossible."

Doc chuckled as he turned the page of a pamphlet to a section on women's club activities in connection with Fire Prevention Week. "Women when they do anything surely hustle and bustle about, but when there's an emergency they know how to get things done. For instance, one woman proposes to reduce the number of fires in the home by tackling the problem in the same way it has been tackled in industry. She would choose someone in the home to be the "engineer" and it would be his job to assign different tasks to each member of the family. The men for example might be put in charge of removing all rubbish from the attic and the basement, while the children might be instructed how to make safe containers for oily dust cloths and matches."

The Doc yawned thoughtfully. He put down the pamphlet he was reading and relit his pipe. Listening he liked far better. I knew that when he leaned his head back and stretched out his legs it was my turn to carry the conversation.

"That's great stuff, this Fire Prevention Week campaign," I said, "but, Doc, here you and I sit reading all of this sound and constructive advice, and what do we do about it? Nothing. Take, for instance, those leading causes of fire loss in 1939 that people talk about. We shall probably persist in being careless in the disposal of matches and cigarettes. No more than a passing thought will be given to the handling of electricity, fuses, cords, and electrical appliances. Our chimneys and flues will remain defective and continue to overheat. Little attention will we pay to our stoves, furnaces, boilers and their pipes, while the chances of our oily and paint soaked rags igniting through spontaneous combustion will continue to be as great as ever.

"Why, I'll bet we would find some of those possible causes of fire are lurking about this house right now. . . . All because we are too lazy to clean up the cellar, and we are too careless with regard to the handling of our gas and electrical equipment, not to mention the mishandling of kerosene, gasoline and cigarettes."

Doc sleepily nodded his head in complete agreement, but said nothing. I knew that he had worked hard all day. He was very tired.

I took the pamphlet from which he had read, and began thumbing through it. An article on industrial fires struck my eye. I read to him the importance that fire protection plays in our present national defense program. True, plants are set afire by sabotage, but in too many cases carelessness is the saboteur in industry. As one man puts it: "It is imperative that industry avail itself of every necessary fire protection device and that time be taken for the instruction of workers in the use thereof. In this hour of need the country cannot suffer a single plant to stand idle through destruction by fire. America must not help to sabotage its own destiny."

Jed had fallen asleep. Hot summer air is too powerful a sedative to allow even vital topics like fire prevention to keep you awake. I awakened the doctor and made him go to bed. It was then 10:30 when we said goodnight for the last time.

A half mile walk to my house, a tumble into bed, and to sleep I went. Seems odd, I know, to tell you all this, but when you see a friend of yours burned to death several hours after being with him, it does something to you. You have to tell someone. Besides, I want you to do a little thinking too.

Perhaps as a tribute to my friend Jed, you will find out about the details of Fire Prevention Week, October 6-12. You might save a life, as I could have, if I had made Doc check up last night when I commented to him about those main causes of fire.

Spontaneous ignition was the cause of the fire in Jed's home. He had neglected to dispose of oil soaked rags which he used while painting his porch furniture.

Fire Prevention Week is The Time to Tell People There is So Much That They Can Do to Prevent Fires

ON October 6, Fire Prevention Week will be ushered in by presidential proclamation for the nineteenth consecutive year. During those years, this autumn week has become the regular check-up week for everyone interested in fire prevention and protection. Fire loss statistics are announced, fire prevention bureaus check over their past activities and plan new and better ones, and fire departments look over their facilities and activities and plan to increase their effectiveness.

Many fire departments have now developed a new tool: the dwelling inspection. Visiting every home, the firemen of hundreds of communities reduced the fire loss of their area and gained the good will of the citizens. This year, the same departments and many more are going to do it over again.

The fireman that goes to the citizen, helps him to understand the fire prevention problem in his own home, and shows him how it may be solved, earns the citizen's admiration and respect.

FOR use in your town, the N.F.P.A. once again this year publishes at cost a wealth of aids to your campaign. These are listed on page 15. Samples of this material will be sent to any fire department on request. Your order for supplies should be received early since these publications are annually very popular and it is difficult to keep up with the demand.

VOLUNTEERS DIE IN RESCUE ATTEMPT

Victims of accident near Bristol, N. H., in which four men died in a well are shown attended by a nurse as rescue squad members attempt resuscitation. The well partially covered by boards is at the right.
Concord Monitor

A recent tragedy at Newfound Lake near Bristol, New Hampshire, in which four men including three firemen and rescue squad members were asphyxiated, each of the last three while trying to rescue his predecessors, forcibly illustrates the dangers that may lurk in and about wells. As this tragedy indicates, firemen are usually the ones to be called upon for hazardous rescue work and must know how to meet such dangers.

In this case two men were pumping out a 42-foot well with a small gasoline pump. As the well was too deep for the pump, a platform was placed about 20 feet down the well and the pump was put into operation at that level in the well. After several hours one of the workmen went down to measure the remaining depth of the water. On his way up he fell back into the water which was six to eight feet deep. His companion climbed down but was unable to locate the victim. He left the well and went for help.

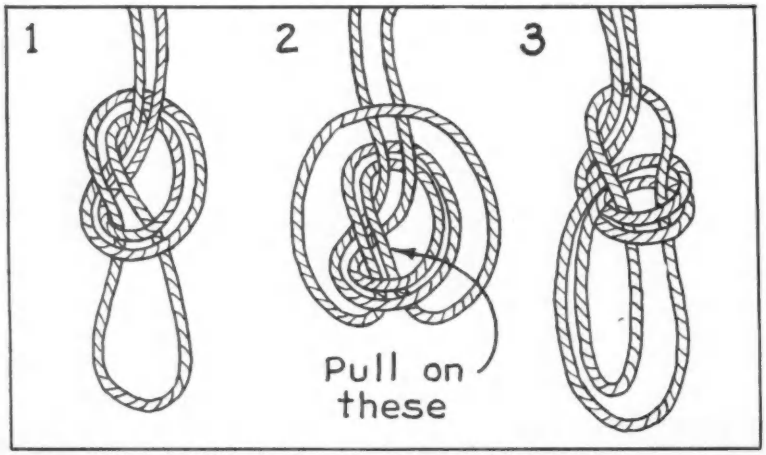
There was reportably a serious delay in securing aid. Several motorists passed by before one stopped and was dispatched for help. At the same time two women who were nearby started for Bristol to call the fire department and a physician. They sounded an alarm at the fire station.

Of the nine members of the Bristol rescue squad only three were immediately available. Some of the other firemen, believing that only the rescue squad was needed, did not answer the first call. With the rescue squad's arrival, four men descended into the well. They apparently did not realize that there was present either an excessive concentration of carbon monoxide, or an oxygen deficiency due to the operation of the gasoline pump. They were overcome. Three of these men fell into the water but the fourth who was wearing a life line and carrying another rope managed to take a leglock on the ladder where he remained until rescued. These circumstances trapped all the experienced rescue squad members at the scene. None of the spectators left on the surface were familiar with the use of the masks and the victims remained in the well an hour before experienced help arrived.

Shortly before the arrival of the Franklin rescue squad which made a 16-mile run, the ladder was pulled up and the fireman clinging to it was rushed to a hospital and revived. Another man was rescued by a Bristol fireman wearing a fresh air mask.

Soon after, the Franklin volunteer rescue squad arrived. This squad consists of 17 members. Four of the men are qualified instructors and all squad members hold Red Cross first aid certificates. The squad's truck has two fresh air masks each with 150 feet of air hose. The masks are equipped with telephones so that the operator of the truck can talk with the men wearing the masks. Air for the masks is supplied by a positive pressure blower mounted on the truck and operated either by hand power or from the truck motor. Wearing these masks, two members of the Franklin rescue squad brought up the three other victims.

While the victims had been under water an hour or more, and were pronounced dead, attempts were made to revive them with inhalators and oxygen obtained from the fire departments of Bristol, Franklin, Laconia, Rumney, Plymouth, and Concord.

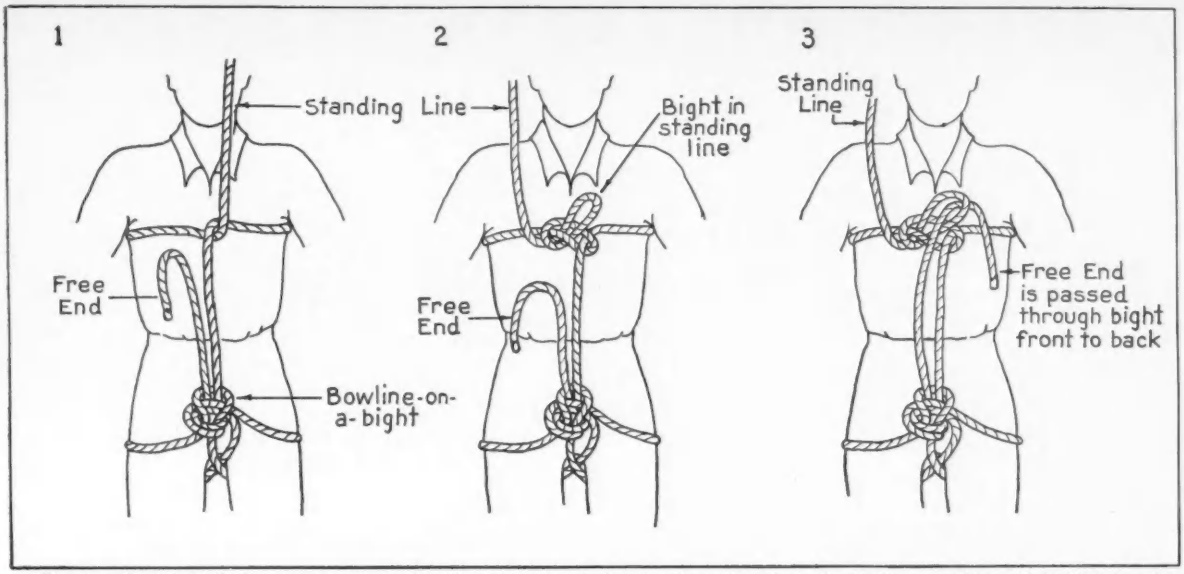


The bowline-on-a-bight is often called the standard fire department rescue knot. Here's how to tie it. 1. Double the rope back on itself, and in the double line tie a simple overhand knot with loop hanging down as shown. 2. Holding knot in left hand pick up center of the loop and place it under left thumb, thus forming two smaller loops. Pull on the loops indicated above and the bowline-on-a-bight is formed as shown in figure 3.

Suggested Rescue Procedure

THE well at Bristol is typical of numerous dangerous situations in which similar accidents have happened. Manholes, cisterns, silos, and even empty fuel oil tanks, may prove equally deadly due to deficiency of oxygen or presence of gases such as carbon monoxide, methane or petroleum vapors.

In making a rescue from such locations the rescuers should think before they act. Where one person has already been trapped, another may lose his life if he tries to make a rescue when he is not adequately protected by a proper breathing device. It is not natural for a fireman to stand idle when such an accident occurs because of the lack of such equipment. But it may be suicide to enter such a death trap without at least wearing a life line manned by helpers above who can pull up the wearer at the first sign of trouble. It should be remembered that the ordinary fire department filter type gas mask may be useless for this work. These masks are designed to remove smoke and toxic gases, allowing the oxygen in the air to pass through. Obviously when there is little or no oxygen present the wearer of a mask not having an independent oxy-



How to make a body tie for rescue workers: 1. After stepping into the two loops formed by the bowline-on-a-bight, a half hitch is taken under shoulders and arms. 2. A bight is then taken in the standing line in front of chest. 3. Free end of rope is passed through bight from front to back and left hanging. Standing rope is then pulled up, making a firm knot.

gen supply may become trapped and lose his life.

One of the old fundamentals of fire department rescue work is to have a rope handy at all times. A life line is standard equipment on every piece of fire apparatus. Every fireman should know how to use it. When descending into a well or manhole a fireman may wear a life line attached as shown in the illustration above. This tie is based upon the old fire department standby knot, a bowline-on-a-bight. In place of the bowline-on-a-bight as shown, some fire departments prefer to use a double bowline in rescue work because it gives three loops of rope instead of two. One loop is placed under the neck and shoulders and a loop is placed around each leg. This knot is tied exactly the same as the familiar single bowline except that the rope is doubled. The double bowline has a slight advantage over the bowline-on-a-bight because of the extra loop. However, it does not make quite as practical a body tie for use in wells and manholes.

In rescuing a person from a well or other place filled with gases, firemen will carry another rope with which to bring up the victim. The quickest means of effecting such a rescue is to tie the rope to a strong belt before descending. The belt can then be quickly snapped or buckled around the victim under the arms. A man not having breathing apparatus available must work very fast to remove the victim before being overcome and there may be no time for tying knots. Thus the belt is an essential factor in such rescues. In fact, some fire departments carry such a belt attached to the end of their life lines.

Fundamentals of Fire Prevention Are Not New

That rules for fire prevention were in existence during the early days of American history can be seen from the following advice published back in 1799. The basic approach toward the problem of fire prevention remains unchanged. The major fire causes of that era such as defective or overheated chimneys, hot ashes, and smoking are still responsible for a huge proportion of the yearly national fire loss.

Directions for Preventing Calamities by Fire

For the Year of Christian Era 1799

Printed and Sold by John & Thomas Fleet at the Bible and Heart, Cornhill, Boston

1. Keep your chimnies and stove pipes clean, by sweeping them at least once a month.

2. Never remove hot ashes in a wooden vessel of any kind, and look well to your ashhole.

3. After sweeping a hearth, see that the brush does not retain any particles of fire, before you hang it up in its usual place.

4. Oblige all your servants to go to bed before you every night, and inspect all your fire places, before you retire to rest. For fear of accidents, let a bucket of water be left in your kitchen every night. The writer once saved his house by this precaution.

5. Do not permit a servant to carry a candle to his bedroom, if he sleeps in an unplastered garret.

6. Cover up your fire carefully every night in ashes. Let the unburnt parts of the billets or chunks of wood, be placed next the hearth, but not set upright in the corners, by which means no sparks will be emitted from the wood. Pour a little water upon the burning ends of the wood which are not completely covered by the ashes. Place before the fire a fender made of sheet iron.

7. Remove papers and linen from near the fire to a remote part of the room.

8. Shut the doors of all the rooms in which you leave fire at night. By thus excluding the supply of fresh air, you will prevent a flame being kindled, should a coal or spark fall upon the floor, or upon any combustible matter in the room. The smoke which issues from this smothered fire, will find its way into every part of the house, and by waking the family, may save it from destruction.

9. If sickness, or any other cause should oblige you to leave a candle burning all night, place it in such a situation as to be out of the way of rats.

10. Never read in bed by candle light, especially if your bed be surrounded by curtains.

11. Strictly forbid the use of segars in your family at all times, but especially after night. May not the greater frequency of fires in the United States, than in former years, be ascribed in part to the more general use of segars by careless servants and children? There is good reason to believe a house was lately set on fire by a half consumed segar, which a woman suddenly threw away to prevent being detected in the offensive practice of smoking.

STOPPING FALSE ALARMS

THE malicious practice of turning in false alarms continues to rank as a most serious threat to life and property. Ten to twenty-five per cent or more of the fire alarms transmitted each year in many communities are false. There are ways, however, to reduce the number of false alarms as has been proven by many fire departments. Two things are necessary, a knowledge of the reasons why persons sound false fire alarms and active cooperation from police departments and municipal courts. If a town has a false alarm problem and wants to solve it, the following suggestions may help.

In correcting an epidemic of false alarms, it is first necessary to determine the type of person responsible for the alarm. Trouble may be coming from school children, or from youths hunting excitement. Intoxicated or mentally defective persons are frequently responsible for a large proportion of such calls. Experience has shown that into one of these classes can be placed almost every false alarm offender.

One thing that will help determine the type of culprit who is sending in false alarms is the time of day they are turned in. Children generally work their mischief during recess periods, directly after school, or on holidays and week-ends when they have little else to do. On the other hand, the older excitement-hunters seldom start before dark and their maliciousness frequently reaches its peak after midnight. This occurs especially around holidays. Unlike children who are usually content to sound one box in their own neighborhood, adult alarm senders often send in a whole string of alarms in sequence and operate from a speeding automobile. Inebriates generally operate on pay day, celebrating with the proceeds of their week's work. Mental defectives of the type that hang around the fire station are often not content to wait the normal sequence of alarms, but manufacture their own excitement, disregarding the danger they cause the firemen who befriend them. They may turn in an alarm any time a good opportunity offers itself. If false alarms come in more or less regularly from particular boxes or from certain fire company districts, such mental defectives are the ones to look for.

When the type of offender who is sending in the false alarms is determined, steps can be taken to correct the situation. The mildest measure to get rid of the curse is the one to look for first.

Preventing school children from sending in false alarms can be accomplished by educational means. Fire departments should take the initiative in seeing that the serious nature and possible consequences of a false alarm are pressed home on children's minds, both at school and at home. To achieve this result, it is generally necessary to carry a campaign to the elders who may never have thought much about the serious consequences of false alarms, and who may have been inclined to decry their importance.

The second class of offenders are the thrill-hunting youths. Some of them may be deterred by educational and publicity campaigns also directed at parents. Notices on public telephones or fire boxes warning of the possible consequences of false alarms, or carrying the threat of severe penalty, will scare many of them off into safer amusements. For those not dissuaded by these warnings, severe punishment may be necessary. Revocation of the license and registration of the owner of a car used in a false alarm junket may be advisable. In many cases, a jail sentence may be the only solution and will help to discourage other false alarmists. Numerous fire departments have found it extremely helpful to solicit the cooperation of judges who regularly hear false alarm cases in order that they may dispense justice in accordance with the actual seriousness of the offense instead of considering it as a youthful prank.

Ordinarily nothing can be done to deter inebriates, particularly those disgruntled against law and order, from sending in false alarms from street boxes. When frequent offenders, such persons can be apprehended because their activity is confined to a limited neighborhood. They can then be caught by a watchful police force. When seized, they should be dealt with in accordance with the law.

An effective treatment for the mentally defective offenders is to take away their privilege of hanging around the fire station. Thus their interest in the department may cease.

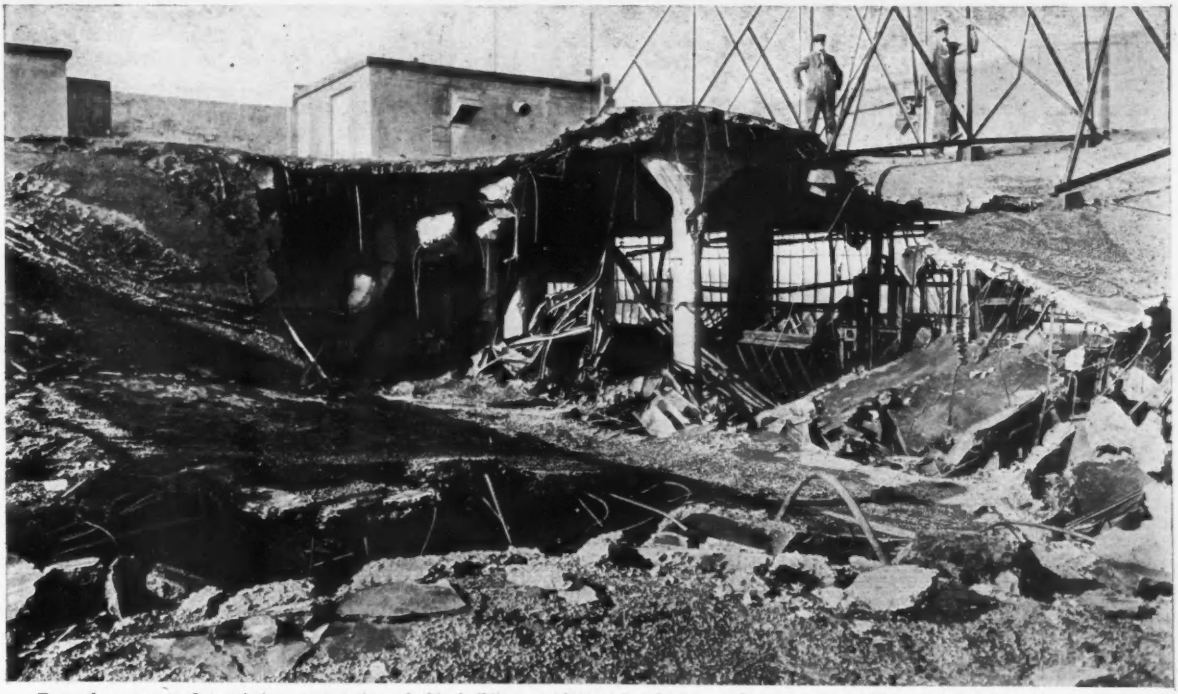
The location and time of all false alarms should be carefully noted so that the operation of regular offenders can be traced. Such persons generally pull their false alarms in the vicinity of either their homes or their places of employment. If the alarms are being sent systematically, as they frequently are, a police radio car will often catch the offender in his next logical stop.

Persons transmitting false alarms may be deterred by locating street alarm boxes in well-lighted areas and if possible on well-traveled streets or busy intersections. Sirens or mechanical bells attached to the street boxes in such a way that they go off immediately after the alarm is transmitted are of considerable help, particularly where a public reward is offered for the apprehension of false alarmists.

One answer to the problem is the realization by everyone that there is nothing smart or courageous in ringing a false alarm. Individuals who persist in endangering lives and property, deprive the community of its normal fire protection and increase the cost of fire protection to the public. They must be apprehended through the active cooperation of every public-spirited citizen.

International

Warning notices on fire alarm boxes should not be such as to discourage people using boxes at an actual fire. In the city where the above picture was taken, boy scouts helped the fire department by posting a warning notice on boxes just before Hallowe'en. Such a special campaign against false alarms is often effective.



Even the concrete fire-resistive construction of this building couldn't resist the severe fire exposure which was inflicted on it by the burning of a large quantity of naphtha and rubber cement.

When is a Building "Fire-proof"?

Construction Which Will Not Burn Cannot Make Up for Bad Arrangement or Lack of Automatic Sprinklers

THE word "fireproof" is interpreted all too liberally by the average layman, and because of this, the term has been abandoned by fire protection engineers, who prefer to use the term "fire-resistive," which does not imply that under all conditions the building is safe from fire. Buildings are "fireproof" only so long as they contain nothing which will burn. The tendency to trim buildings of otherwise incombustible construction with wood, and to fill them up with combustible merchandise or furniture, limits the value of the fire-resistive construction in direct proportion to the extent to which such trim and contents will burn. Such buildings do not burn down, but they can and do burn out.

The study of thousands of fires by the N.F.P.A. has demonstrated that the material of which the building is constructed is by no means the only factor in determining how safe any particular building may be from loss by fire. It is of great importance that the building be so arranged inside that fire may not readily spread from floor to floor and from one end of it to the other, that concentrations of combustible materials be avoided or that the building be equipped with automatic sprinklers.

THE first fire-resistive building in America was erected in 1823 in Charleston, S. C., for the purpose of preserving county records, many of which date back to the early part of the seventeenth century. It is still standing. The building, constructed of stone throughout, is located in a park safeguarded against the possibility of severe exposure fires. The building is three stories high, with stone walls, stone floors and metal roof. An interesting feature is a stairway in the center of the structure, also entirely of stone, having apparently no support other than the walls which adjoin it. Up to a few years ago there were no lights of any sort permitted in the building and all work ceased at sundown. Within the past several years, however, electric lights have been installed.

From this early structure to the modern fire-resistive skyscraper there is a wide range of types of fire-resistive construction, varying as to their fire resistance in direct proportion to the susceptibility to damage by heat of the materials employed and the protection provided to such structural materials. While most of the serious fire losses to fire-resistive buildings have been due primarily to the presence of readily combustible contents, there are other factors having to do with the construction and arrangement of the building itself which have added to the magnitude of the loss. Among these construction factors are lack of adequate protection for steel structural members, the use of wood roofs on otherwise fire-resistive buildings, inadequate fire protection, unprotected vertical openings, absence of fire doors, large single fire areas, and failure to provide protection against exposure fires.

In other words while it is desirable from a fire protection point of view to construct buildings with incombustible materials, such materials alone do not guarantee fire safety in structures where many of the other fundamental fire safety rules have been overlooked.

The "Model A" Super

Which Every Volunteer Fire Department Should Know About

Both 1 Quart and 1½ Quart Sizes

Every volunteer Fire Department should know the exclusive qualities of this first-aid extinguisher which experience shows should be the first to be carried into any fire because:—

FIRST:—
It is safe to use on electrical fires. Fyr-Fyter fluid is not only a powerful fire extinguishing fluid, but a most certain insulation—safeguarding the operator against serious injury or possible death from electrical contact.

AND SECOND:—
It is effective on concealed fires in walls and other "hard to reach" locations and is effective also on fires in greases, oils and the more flammable liquids.

SALESMEN WANTED

If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

THE FYR-FYTER COMPANY
Dept. 20-57 DAYTON, OHIO

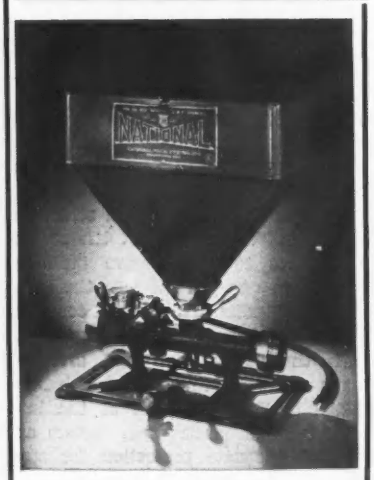
"Pied Piper" Tactics Trap Apparatus Chasers

LIKE their brother firemen throughout the United States and Canada, the volunteers of Washington, N. J., have become a little tired of that half-witted breed of people who hop into their cars at the first sound of the siren, and clutter up the street or country road all the way to the fire and then abandon their machines where they block the road to following fire apparatus.

They decided to do something about it. After consideration, they determined to sound a false alarm for a dead-end street where it would be impossible for an "engine-chasing" citizen to remove his car after it had been hemmed in by the trucks. On the evening selected, firemen were instructed to be at the borough hall by 6:30 o'clock. At 6:45 the siren sounded, the firemen sprang to their places, and the first two engines rolled down the highway with their sirens screaming as if half the borough was on fire. Citizens stood on the sidewalk as the trucks rushed by. The offending apparatus chasers, true to form, jumped into their cars and drove off in hot pursuit of the fire engines.

A minute later the hook and ladder and the emergency truck came roaring down the street. In the meantime, the two pumpers leading the way had turned into a side street. Like the story of the children of Hamlin Town, the motorists followed their "Pied Pipers." The proverbial door of escape was shut when the ladder truck drew up across the entrance to the street as the fire-police on duty gave each driver a stern warning and the promise of a fine for the next offense.

The story was completed just a month later when fire destroyed a large barn located on a side road near the borough. In spite of the warnings, traffic conditions were "the worst ever." Motorists who followed the fire engines so packed the narrow road that the department was unable to bring some of its apparatus to the scene. Outside help called was completely blocked by the cars of the fire-chasing motorists. The fire department promptly requested police to take the numbers of all cars blocking the roads. Through the State Motor Vehicle Department the owners were traced and given summons. In addition to local drivers motorists from other sections of the county and even some who came from Pennsylvania, across the Delaware river, were also caught. Of the 64 arrested, only four escaped without fines.



SPECIAL EQUIPMENT FOR FIRE DEPARTMENTS

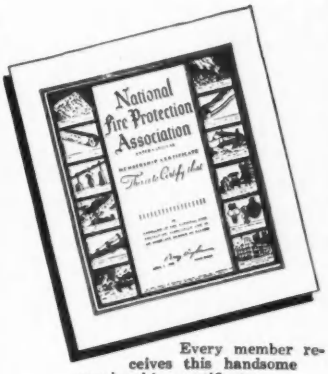
NATIONAL
SF-21
FOAM GENERATOR
for running board mounting
Capacity—
1100 gallons of foam per minute
Write for details to:

NATIONAL FOAM SYSTEM
INCORPORATED
1633 Sansom St., Philadelphia, Penna.

Water in Flooded Basement Furnishes Suction

Firemen in Easton, Maryland, are experienced in fighting rural fires and know that they must be resourceful to find adequate water in areas not served by hydrants. When they received a call for a roof and attic fire in a house located 3,000 feet from a hydrant they thought that they might be up against a tough water supply problem until they learned that the cellar of the burning house was flooded at the time with 18 inches of water. Dropping a suction hose through a cellar window, as shown below, the firemen were able to supply two 1½-inch lines from their pumper. The threatening fire was extinguished with only $500 damage.

Membership in the N.F.P.A.



Every member receives this handsome membership certificate.

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

INDIVIDUAL membership in the National Fire Protection Association costs $10 per year. The membership plan for the Volunteer Firemen's Section is designed to give each fire company the advantages of N.F.P.A. membership. The fire company, as a member, receives at its headquarters a complete set of all regular N.F.P.A. literature, including the *Quarterly* magazine, as issued. In addition, as a special service to the Volunteer Firemen's Section, each fire company holding N.F.P.A. membership is entitled to have copies of the magazine VOLUNTEER FIREMEN sent to the home address of 10 firemen each month. If more than 10 firemen want to receive the magazine, an additional one dollar should be sent in with the membership fee for each fireman in excess of 10 enrolled.

Because of the large amount of material mailed to members, less than $10 can not be accepted from any company.

FIRE SCHOOL NOTES

The second annual Firemen's Training Conference of the Pennsylvania Fire School will be held at State College, the week of August 26. Maryland will hold its eleventh annual Fire College sessions at the University of Maryland, College Park, September 3-6. The tenth Kansas Fire College is scheduled for September 10-13 at University of Kansas, Lawrence.

Walter T. Banning, former chief of the fire department of New Philadelphia, Ohio, serves as field instructor for the firemen's training program under the Ohio State Department of Vocational Education. He will be joined September 1 by two additional full time field instructors appointed by the advisory board in charge of the program in July. The new instructors are Captain William Rettig of the Toledo Fire Department and Captain James Hassett of the Cincinnati Fire Department.

NEW TEXTS

The Selection of Fire Fighters. (Public Administration Service, 1313 East 60th St., Chicago. Ill. 40 pages, 75 cents.) This is not a training text but is a publication fire department officials and instructors will find valuable for study and reference. It covers the details of an orderly procedure in the recruiting of men for the fire service. It is particularly useful because it presents ten forms in use for applications and for the various tests, physical, medical, written and oral, which prospective firemen are usually given. Six of these forms are obtainable separately in quantities for use by fire departments.

Rescue and First Aid Equipment. (International Association of Fire Chiefs, 24 West 40th St., New York, N. Y. 28 pages. Planographed. 25 cents.) Latest publication in the fire chiefs' series.

A Major Disaster Emergency Plan. (International Association of Fire Chiefs, 24 West 40th St., New York, N. Y. 50 pages. 15 cents.) A recommendation based on a disaster plan worked out for the city of Los Angeles.

NEW PRODUCTS

A new portable lamp has just been announced by U-C-Lite Manufacturing Company, 500 North Dearborn St., Chicago. Known as "Big Beam No. 700", the new lamp projects a powerful ray over 2,000 feet. It costs less than $10.00.

A rechargeable wet-cell battery for flashlights similar in principle to the automobile storage battery has been announced by the Ideal Commutator Dresser Co., 6519 Park Ave., Sycamore, Ill.

Here's an inexpensive and versatile piece of equipment that will pay its way in any fire department. Light and small enough to trail any passenger car to the fire, or to be handled on smooth ground by one man, it is big and husky enough to deliver 150 honest gallons per minute at 100 lbs. pressure.

The self-priming centrifugal pump cannot clog or fail to function due to dirt, twigs, etc. which may be drawn in through the suction strainer, and the dirtiest water will not harm the pump.

Send for a free copy of Bulletin 47 for full details.

The LaBour Company, Inc.
1567 Sterling Ave.
Elkhart, Ind., U. S. A.

YOUR LIFE IS IMPORTANT!

DON'T RISK IT NEEDLESSLY

THE MODEL "V" SIREN

IS CONSIDERABLE ADDITIONAL ASSURANCE AT MINIMUM EXPENSE

WRITE FOR BULLETIN 62

Federal Electric Co., Inc.

8717 S. State St. Chicago, Ill.

CAIRNS HELMETS

When you buy a helmet, you're buying protection. Be sure you get the protection you expect. Over 100 years of experience are built into every CAIRNS HELMET, and the best safety features that experience has developed. Made in a number of styles and weights, to meet your preference. Write for Catalog 30C, describing both leather and aluminum helmets, and the CAIRNS QUALITY line of firemen's personal equipment.

CAIRNS & BROTHER

444 Lafayette Street New York

$10.00-$3.00-$2.00 EACH MONTH

PYRENE PRIZE LETTER CONTEST

● **IT'S EASY TO WIN!!!**

Have you ever put out a fire with a fire extinguisher? If you have you can put yourself in line for a cash prize.

● **WRITE A LETTER . . . .**

That is all that you have to do. Just write us about an experience where an approved extinguisher of any make did good work in stopping a fire.

● **RECEIVE $10.00 FOR 250 WORDS**

You can, by winning first prize. Decide to be one of the three firemen this month who will take home a cash prize by simply relating an experience with any approved fire extinguisher in this contest sponsored by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN.

● **NO RED TAPE . . . .**

No fancy writing, no formality — merely send your entry to the address given below.

FIRST PRIZE—$10.00

R. D. TOMPKINS
Granbury Volunteer Fire Department
Granbury, Texas

Ingenious But Risky

One day while installing a battery cable on a car, the cable came in contact with a gasoline tank. A hole was burned in it and it immediately caught fire. The fire spread quickly on the floor and around the tank. One of the boys in the shop rushed for a carbon tetrachloride extinguisher on the wall and began to extinguish the fire on the floor, but as gasoline was running out of the tank very fast he was unable to stop the fire. I, therefore, grabbed a large rag and soaked it with the extinguisher fluid and had the boys push the car off the fire. Getting under the car, I held the soaked rag over the hole, thus stopping the flowing of gasoline. The other garage helpers kept the extinguisher going on my arm and on the tank and put out the fire. The customer's car was saved with very little damage done.

SECOND PRIZE—$3.00

C. A. SCHERER
Irvington Fire Department
Irvington, N. J.

Fishing Trip Fire

Last summer on a fishing trip with three friends we were forced to choose between calling off our trip or chartering the only available boat, a 20-foot cabin cruiser of ancient vintage. Our enthusiasm for fishing overcame our caution and within a short time we were bouncing over the brine about two miles from shore. At about this point our motor coughed itself into a coma and left us at the mercy of the waves.

Our skipper proceeded to disassemble the carburetor while we began to fish. At this point things began to happen. The skipper decided that he could work better with a freshly lighted pipe. The resulting flash enveloped the motor and dripping gasoline carried the fire to the oil covered water in the bilge. With clothes ablaze the skipper went overboard.

One of our party secured a carbon tetrachloride extinguisher from the cabin and soon the blazing motor was smothered. The remaining fluid he then directed into the bilge and with the aid of another carbon tetrachloride extinguisher this fire was also smothered.

The skipper was fished out with third degree burns on arms and face. Motor oil was applied to the skipper's burns and our craft was towed back to dock.

This experience proves to be a good example of quick action on the part of both the men involved and the equipment used.

THIRD PRIZE—$2.00

EDWARD BRUNO
A. E. Phelps Engine Co. No. 1
Crown Point, N. Y.

Barn Fire Noticed in Time

I am a janitor in our High School and also President of our Fire Department, the A. E. Phelps Engine Company No. 1. On May 29 a little before 11 o'clock as I was coming home from school, I noticed smoke coming out of a large barn across the street. There was no one around. I ran over, and entering the barn I noticed a small fire burning in one corner. I knew that just across the street from this barn was a garage where they kept two 1½-gallon soda acid extinguishers. I grabbed one of the extinguishers, rushed back, and had the fire out in a few minutes. It saved the building and also prevented a very serious fire. A short distance away from this barn was another barn and a number of very beautiful houses which might have gone up in smoke had the fire not been extinguished.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

Campaign Material for Fire Prevention Week

October 6-12, 1940

Charges must be made to cover cost of quantity distribution as below:

Poster. (FPW 1) A striking red, white, and blue Fire Prevention Week Poster, 12 x 16 in. "Keep Fire in Its Place." (Illustrated above.) Space for imprinting on bottom. *Sample copies gratis, $1.00 per hundred, $8.50 per thousand.*

Poster. (FPW 2) Alternate design. A two-color Fire Prevention Week Poster, 12 x 16 in. "Help Prevent Fires." Space for imprinting on bottom. *Samples on request, $1.00 per hundred, $8.50 per thousand.*

Flyer. (FPW 3) A striking flyer, "Meet Baby Sandy," in pink, red, and black, 6 x 9 in., emphasizing fire fatalities, and giving the essential rules for fire safety. Intended for public distribution in schools, etc. *Sample copies gratis, 50c per hundred, $3.50 per thousand. (Imprinting, if desired, at additional cost.)*

Flyer. (FPW 4) A flyer, "Was Somebody Careless?", in red and black, 6 x 9 in., telling the story of Fire Prevention Week in condensed form and giving the essential rules for fire safety. Intended for public distribution in schools, etc. *Sample copies gratis, 50c per hundred, $3.50 per thousand. (Imprinting, if desired, at additional cost.)*

Fire Safety Quiz. (FPW 5) An eight-page folder containing (a) short text on fire prevention and protection (b) quiz on text (c) answers. Interesting, entertaining, as well as instructive. For adults as well as children. *Sample copies gratis, $1.00 per hundred, $7.50 per thousand.*

Fire Prevention Picture Book. (FPW 6) A 16-page 6 x 9 in. booklet for school use, with pictures of familiar home hazards, showing things children can do to prevent fires. The pictures are in outline form for coloring with crayons. The back page is left blank for local imprinting. *Price 5c per copy, $4.00 per hundred, $30.00 per thousand.*

Fire Prevention Week Handbook. (FPW 7) A fifty-page illustrated Handbook covering all phases of Fire Prevention Week and Clean-Up Campaigns. It is intended primarily for the guidance of committees and others planning Fire Prevention Week. It is also valuable to teachers and school superintendents. *Price 15c per copy, $10.00 per hundred.*

Facts About Fire. (FPW 8) A 1940, 16-page Supplement to the Fire Prevention Week Handbook. This pamphlet contains material valuable for preparation of speeches, newspaper publicity, radio broadcasts, etc. *Price 5c per copy, $3.50 per hundred.*

Fire Prevention Exhibits. (FPW 9) A 16-page pamphlet reproducing 22 photographs of successful state and county fire exhibits, window displays and other exhibits used to dramatize fire prevention. *Price 10c per copy, $7.50 per hundred.*

Selected Demonstrations for Use in Fire Safety Education. (FPW 10) An attractive 40-page pamphlet, 80 illustrations, presenting a selection of effective methods used in fire prevention demonstrations. *Price 35c per copy $25.00 per hundred.*

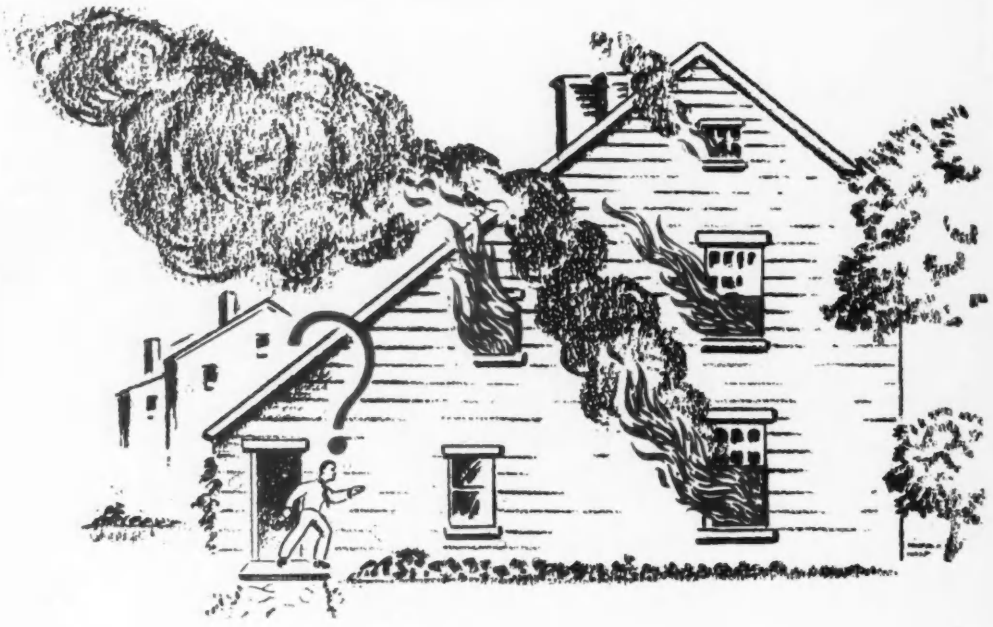
Keep Your Home from Burning. (FPW 11) A two-color folder designed for general distribution to homes. The last page is left blank for special imprinting if desired. *Sample copies gratis, $1.50 per hundred, $8.50 per thousand.*

All the above prices are F. O. B. Boston. Orders will be shipped express collect unless other shipping instructions are received. Single copies and small orders will be sent parcel post prepaid. Designating numbers in parenthesis after each title above are for convenience in ordering by telegram. Order early, avoid delay.

For the above material as well as for general information on fire prevention apply to

NATIONAL FIRE PROTECTION ASSOCIATION, 60 Batterymarch St., Boston, Mass., U.S.A.

"Where's The Nearest Fire Alarm Box?"



Three - Fold Fire Alarm Box on Type U1000-6 Pedestal

Such a question wouldn't be asked in a community where an adequate number of boxes are conspicuously placed.

The cost of this more ample protection is negligible when you think of what it can prevent.

Gamewell surveys indicate that a "box a block" in congested, high value districts is none too many. Then in residential sections a box every 500 feet and where localities are sparsely settled, a box at every group of buildings provides ideal protection.

Check up on the fire alarm box situation in your town, then ask the co-operation of Gamewell engineers.

THE GAMEWELL COMPANY

NEWTON UPPER FALLS MASSACHUSETTS